

ABSTRACT OF THE DISCLOSURE

A method and an apparatus for determining the performance of a secondary air charging system for an internal combustion engine in order to determine the amount of secondary air supplied in the secondary air charging system. This is achieved by measuring the heat generated by the compression of the secondary air with temperature sensors. Insofar as the secondary air charging system is powered by a turbine arranged in parallel with the throttle valve in the intake tract, the measured temperature value for the compressor can be compared with a reduction in temperature of the intake air behind the turbine. Reliable information concerning the amount of secondary air supplied can be determined by simple sensors, thereby obviating the need for an air-mass sensor which is expensive to produce and sensitive to contamination.